

Exploration of Patient Attitudes Regarding Use of Computers at the Bedside by Care-Givers

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Implementation of computing technology at the bedside in the acute care setting introduces a new set of paradigms and issues into an already complex environment. Evaluation of the use of this technology in that setting is difficult to perform. There conceivably are issues about the technology for the patients beside whose beds it increasingly resides. In a climate where the satisfaction of the customer becomes more important daily, it is essential to know what issues exist for patients. Use of computing technology at the bedside provides many efficiencies to the care-giving process. However, the effect on patients' perceptions of that process must also be studied to ensure that the presence of the technology has no significantly negative effect on clinical outcomes.

The purpose of this study was to investigate the attitudes of the patients of an acute care, inpatient setting regarding the use of a computer at the bedside. The study was intended to be exploratory in nature, gathering correlational data about patients' perceptions about the use of the technology in this setting and identifying areas where patients are dissatisfied that might be appropriate for further study. Specifically, the questions to be answered included: 1) Do patients believe that use of the computer at the bedside helps their care-givers provide them better care? 2) Do patients believe that use of computer technology is an important aspect of modern hospital care-giving? 3) Do patients believe that they see their nurses more frequently as a result of the use of the computer at the bedside? 4) Do patients believe that the information about them on the computer is secure and confidential? 5) Do patients believe that nurses pay more attention to the computer than to them? 6) Overall, are patients satisfied with the use of a computer in their care? 7) Are there any aspects of the use of computing at the bedside that bother patients? The authors also sought to identify correlations between these questions and patients' age, sex, previous computing experience, and nursing unit.

Overall, the responses of patients to the use of computing technology at the bedside demonstrated by this survey was positive. Most of the patients agreed at statistically significant levels with statements regarding the importance of computing to modern hospital care, the contribution of the technology to providing better care, having more contact with nursing staff because of the bedside computer, and overall satisfaction with the use of the computer in their care. While females also agreed with the statement regarding the confidentiality and security of the information in the clinical information system, males demonstrated statistically significant ambivalence about that issue: they appeared to be significantly less willing to trust that the statement was true.

There are two findings which merit further attention. Comments concerning the noise generated by computers need to be researched and better defined in order to identify exact sources of noise. More importantly, additional studies of patients' distrust of the security and confidentiality of the computer medical record are indicated to determine validity of that distrust and to specify causes and types of concern. Findings should be reported to the nursing staff of McKay-Dee Hospital to reassure them that patients see computers as a positive aspect of their care and do not dislike having nurses chart in the room. Education of nurses with more clearly defined methodologies for interacting with patients while using the computer should be developed such as means by which they can involve patients in care decisions while nurses are using computer-based care planning. Institutional officials will also be considering the findings of this investigation in developing the items to measure patient satisfaction with bedside computing on routine patient satisfaction surveys.